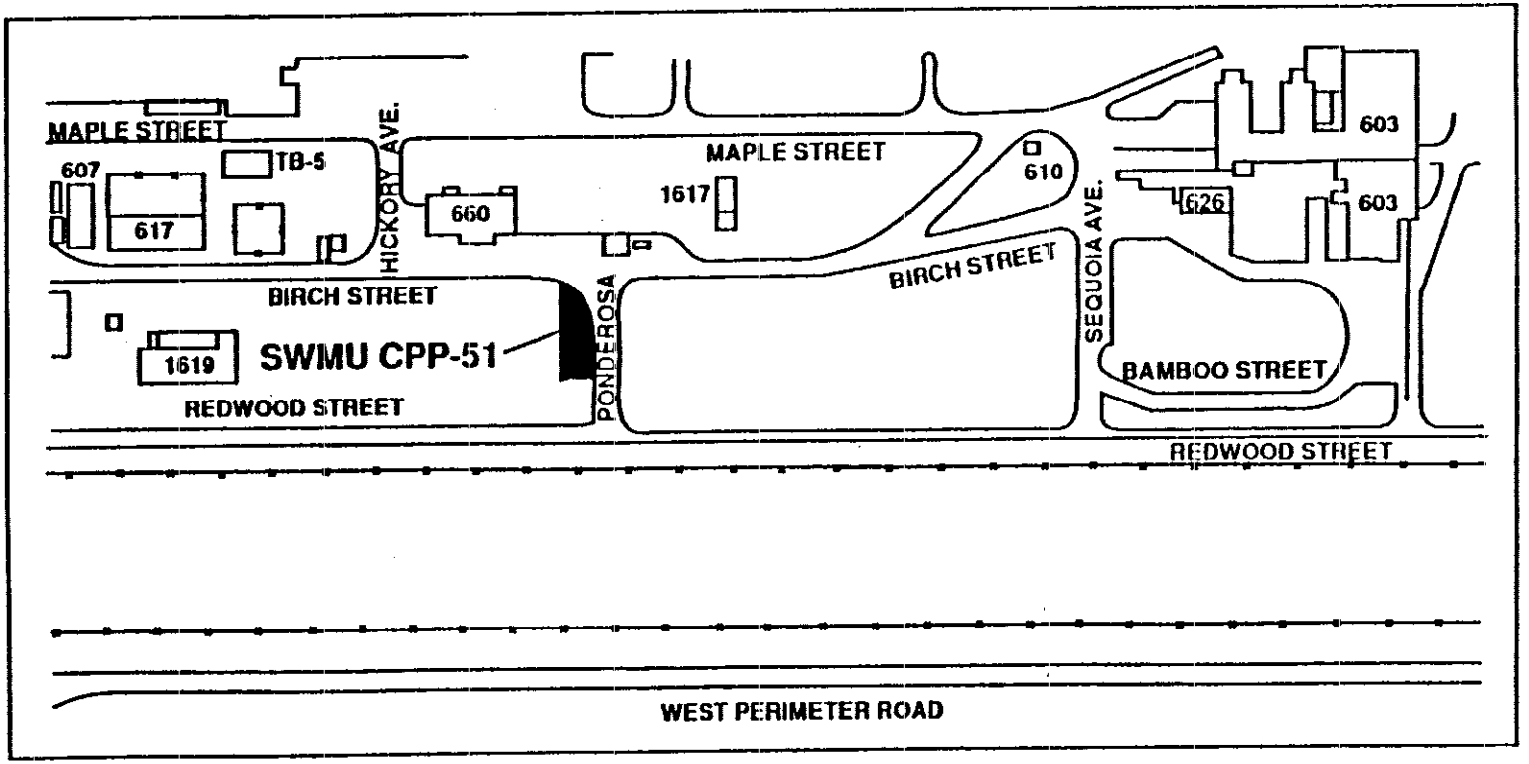
Track 1 Decision Documentation Package

Waste Area Group 3 Operable Unit 3-01

Site CPP-51

PCB Staging Area West of CPP-660

Location of SWMU CPP-51



DECISION DOCUMENTATION PACKAGE
COVER SHEET

PREPARED IN ACCORDANCE WITH

TRACK 1 SITES:
GUIDANCE FOR ASSESSING
LOW PROBABILITY HAZARD SITES
AT INEL

SITE DESCRIPTION: PCB-STAGING AREA WEST OF CPP-660

SITE ID: CPP-51 **OPERABLE UNIT:** 3-01

WASTE AREA GROUP: 3

I. SUMMARY - PHYSICAL DESCRIPTION OF THE SITE: During 1985 the area was used as a PCB-Transformer and contaminated soil, debris and concrete staging area from the ICPP Utilities Replacement and Expansion Project. The area is unpaved and is located along the west side of the ICPP facility at the northwest corner of the intersection of Birch Street and Ponderosa Avenue. During the staging of transformers during 1985, two transformers leaked oil onto plastic sheeting. Sampling of the site was accomplished in 1990 to verify that the soil in CPP-51 had not been impacted by PCBs. The area is approximately 100 feet long by 50 feet wide.

II. SUMMARY - QUALITATIVE ASSESSMENT OF RISK: The qualitative risk of the site is predicted by the risk assessment to be medium based on risk to groundwater. However, given the low concentrations of PCBs in the soil, the depth to groundwater, the relative immobility of PCBs in soil and basalt, and the very conservative assumptions used in the Track 1 risk assessment, there is little likelihood that groundwater will be impacted by PCBs. The reliability of the data is high.

III. SUMMARY - CONSEQUENCES OF ERROR: Limited risk due to low PCB concentrations of PCBs being left in the soil may result due to the no further action recommendation.

IV. SUMMARY - OTHER DECISION DRIVERS: The clean-up requirements provided for in the Toxic Substances Control Act (TSCA) 40 CFR 761.125 require remediation of PCBs in Industrial Areas to 25 ppm PCBs by weight in soil. The guidance provided in OWSER Directive 9335.4-01 "Guidance for Remedial Actions at Superfund Sites with PCB Contamination" also requires clean-up at restricted access industrial areas of 25 ppm PCBs by weight in soil. This clean-up requirement is based on health risk assessment criteria using occupational exposure of site workers by soil ingestion and dermal contact as the exposure scenario. Provided the established criteria in TSCA are considered an ARAR for the INEL, the existing soil concentrations can be left in place and no further action is recommended for this site. This ARAR, together with the very conservative assumptions used in performing the Track 1 risk assessment, provides for a reasonable foundation for recommending no further action at this site.

RECOMMENDED ACTION: No Further Action.

SIGNATURES	# PAGES:	DATE:
Prepared By:	DOE WAG Manager:	
Approved By:	Independent Review:	

DECISION STATEMENT
(BY DOE RPM)

DATE RECD: 4/17/92

DISPOSITION: Low levels of PCBs present – no further action required at this time. RCD will review this unit.

DATE: 4/17/92	**# PAGES (DECISION STATEMENT):**
NAME: Leona Lyon	**SIGNATURE:**

DECISION STATEMENT
(BY EPA RPM)

DATE RECD: 4/9/92

DISPOSITION:

PCB soil results show contamination level below cleanup concerns under PCB Spill Cleanup Policy. Process was to remove x'fmers + contaminated soil. No further action needed based on available record

DATE: 6/4/92	# PAGES (DECISION STATEMENT): 1
NAME: Wayne Penn	SIGNATURE: [signature]

DECISION STATEMENT
(BY STATE RPM)

CPP-51

DATE RECD: 4/9/92

DISPOSITION:

Based on low concentrations of PCB present the site does not pose an unacceptable risk.

This decision will be reviewed at the time of the Record of Decision.

DATE: 4/9/92	# PAGES (DECISION STATEMENT):
NAME: Dean J. Nygaard	SIGNATURE: Dean J. Nygaard

PROCESS/WASTE WORKSHEET
SITE ID CPP-51

Col 1 Processes Associated with this Site	Col 2 Waste Description & Handling Procedures	Col 3 Description & Location of any Artifacts/Structures/Disposal Areas Associated with this Waste or Process
Process Storage and temporary staging of PCB transformers.	Transformers containing between 160 and 400,000 ppm PCBs in oil were stored or staged in CPP-51.	Artifact Soil Location CPP-51 Description Possible PCB Contamination Artifact Location Description Artifact Location Description
Process Storage and temporary staging of contaminated PCB contaminated soil, debris and concrete.	Forty Drums of contaminated soil, debris and concrete were stored temporarily in CPP-51 while awaiting disposal.	Artifact Soil Location CPP-51 Description Possible PCB Contamination Artifact Location Description Artifact Location Description
Process		Artifact Location Description Artifact Location Description Artifact Location Description

CONTAMINANT WORKSHEET

SITE ID CPP-51

PROCESS (Col 1) Transformer Storage **WASTE** (Col 2) PCBs

Col 4 What known/potential hazardous substances/constituents are associated with this waste or process?	Col 5 Potential sources associated with this hazardous material	Col 6 Known/estimated concentration of hazardous substances/ constituents[a]	Col 7 Risk based concentration mg/kg	Col 8 Qualitative risk assessment (Hi/Med/Lo)	Col 9 Overall reliability (Hi/Med/Lo)
PCBs	Transformer Oil	≤0.120 ppm	0.049 ppm	Med	Hi
PCBs	Contaminated Soil, Debris	≤0.120 ppm	0.049 ppm	Med	Hi

1. Occupational Exposure concentration for risk

QUALITATIVE RISK AND RELIABILITY EVALUATION TABLE

	QUALITATIVE RISK		
	Low	Medium	High
HIGHLY UN-RELIABLE	screening data	**TRACK II**	screening data
HIGHLY RELIABLE	**NO ACTION REQUIRED** *	**RI/FS**	**INTERIM ACTION** *
reliability	**LOW** concentration resulting in risk < 10^{-6}	**MEDIUM**	**HIGH** concentration resulting in risk > 10^{-4}
	qualitative risk		

* if there exist sufficient data to identify an appropriate remedy

Question 1. What are the waste generation process locations and dates of operation associated with this site?

Block 1 Answer:

The site was used as a PCB transformer and PCB contaminated soil, debris and concrete staging area during 1985. Some PCB oil was spilled onto plastic sheeting. The PCB transformers and contaminated materials were ultimately disposed of at a commercial disposal facility (US Pollution Control Inc., Murray, Utah) in late 1985.

Block 2 How reliable is/are the information source/s? X High __Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Sampling Report and Occurrence Report document the spill.

Block 3 Has this INFORMATION been confirmed? X Yes __No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Sampling Report and Occurrence Report document the spill.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[ ]		Analytical data	[ ]	
Anecdotal	[ ]		Documentation about data	[ ]	
Historical process data	[ ]		Disposal data	[ ]	
Current process data	[ ]		Q.A. data	[ ]	
Areal photographs	[ ]		Safety analysis report	[ ]	
Engineering/site drawings	[ ]		D&D report	[ ]	
Unusual Occurrence Report	[ ]		Initial assessment	[ ]	
Summary documents	[ ]		Well data	[ ]	
Facility SOPs	[ ]		Construction data	[ ]	
OTHER	[X]	1			

Question 2. What are the disposal process locations and dates of operation associated with this site?

Block 1 Answer:

During 1985 while PCB-transformers were stored in the staging area, leaks onto plastic sheeting beneath two transformers were identified.

Block 2 How reliable is/are the information source/s? _X_High _Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Sampling report and occurance report document the spill.

Block 3 Has this INFORMATION been confirmed? _X_Yes __No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Sampling report and occurance report document the spill.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[ ]		Analytical data	[ ]	
Anecdotal	[ ]		Documentation about data	[ ]	
Historical process data	[ ]		Disposal data	[ ]	
Current process data	[ ]		Q.A. data	[ ]	
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Unusual Occurrence Report	[ ]		Initial assessment	[ ]	
Summary documents	[ ]		Well data	[ ]	
Facility SOPs	[ ]		Construction data	[ ]	
OTHER	[X]	1			

Question 3. Is there empirical, circumstantial, or other evidence of migration? If so, what is it?

Block 1 Answer:

There is no evidence of migration from this event.

Block 2 How reliable is/are the information source/s? _X_High __Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Sampling Report and Occurrence Report document no migration.

Block 3 Has this INFORMATION been confirmed? _X_Yes __No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Sampling Report and Occurrence Report document no migration.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[ ]		Analytical data	[ ]	
Anecdotal	[ ]		Documentation about data	[ ]	
Historical process data	[ ]		Disposal data	[ ]	
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Unusual Occurrence Report	[ ]		Initial assessment	[ ]	
Summary documents	[ ]		Well data	[ ]	
Facility SOPs	[ ]		Construction data	[ ]	
OTHER	[X]	1			

Question 4. Is there evidence that a source exists at this site? If so, list the sources and describe the evidence.

Block 1 Answer:

No. The transformers and contaminated material have been removed and are no longer onsite.

Block 2 How reliable is/are the information source/s? _X_High __Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Sampling Report documents low (<1 ppm) PCBs in the soil.

Block 3 Has this INFORMATION been confirmed? _X_ Yes __No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Sampling Report documents low (<1 ppm) PCBs in the soil.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[ ]		Analytical data	[ ]	
Anecdotal	[ ]		Documentation about data	[ ]	
Historical process data	[ ]		Disposal data	[ ]	
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Unusual Occurrence Report	[ ]		Initial assessment	[ ]	
Summary documents	[ ]		Well data	[ ]	
Facility SOPs	[ ]		Construction data	[ ]	
OTHER	[X]	1			

Question 5. Does site operating or disposal historical information allow estimation of the pattern of potential contamination? If the pattern is expected to be a scattering of hot spots, what is the expected minimum size of a significant hot spot?

Block 1 Answer:

No. Composite sampling has verified that the site contains PCB concentrations in the soil at less than 1 ppm. No oil staining was apparent on the soil and the low PCB concentrations are ubiquitous throughout the site.

Block 2 How reliable is/are the information source/s? X High __Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Sampling Report verifies information.

Block 3 Has this INFORMATION been confirmed? X Yes __No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Sampling report confirms information.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[ ]		Analytical data	[ ]	
Anecdotal	[ ]		Documentation about data	[ ]	
Historical process data	[ ]		Disposal data	[ ]	
Current process data	[ ]		Q.A. data	[ ]	
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Unusual Occurrence Report	[ ]		Initial assessment	[ ]	
Summary documents	[ ]		Well data	[ ]	
Facility SOPs	[ ]		Construction data	[ ]	
OTHER	[X]	1			

Question 6. Estimate the length, width, and depth of the contaminated region. What is the known or estimated volume of the source? If this is an estimated volume, explain carefully how the estimate was derived.

Block 1 Answer:

The contaminated region is approximately 100 feet long, 50 feet wide and 6 inches deep. This area represents the area of the entire CPP-51 site and the contamination is below 1 ppm PCBs.

Block 2 How reliable is/are the information source/s? X High __Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Area has been sampled to confirm the contaminated region.

Block 3 Has this INFORMATION been confirmed? X Yes __No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Sampling report confirms information.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[ ]		Analytical data	[ ]	
Anecdotal	[ ]		Documentation about data	[ ]	
Historical process data	[ ]		Disposal data	[ ]	
Current process data	[ ]		Q.A. data	[ ]	
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Unusual Occurrence Report	[ ]		Initial assessment	[ ]	
Summary documents	[ ]		Well data	[ ]	
Facility SOPs	[ ]		Construction data	[ ]	
OTHER	[X]	1			

Question 7. What is the known or estimated quantity of hazardous substance/constituent at this source? If the quantity is an estimate, explain carefully how the estimate was derived.

Block 1 Answer:

18.6 grams, PCBs, based on the below calculation and assuming soil density of 1.7 gm/cc and an average PCB concentration of 0.094 ppm based on Table 4-1 of Sampling Report.

$$50 \text{ ft} \times 100 \text{ ft} \times 1 \text{ ft} \times \frac{1728 \text{in}^3}{1 \text{ft}^3} \times \frac{16.38 \text{cm}^3}{1 \text{in}^3} \times \frac{1.7 \text{gm}}{\text{cm}^3}$$

$$\times \ 0.094 \text{ ppm} = 23 \text{ gm PCBs}$$

Block 2 How reliable is/are the information source/s? X High __Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Based on sampling report information.

Block 3 Has this INFORMATION been confirmed? X Yes __No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Sampling information confirms calculation.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[ ]		Analytical data	[ ]	
Anecdotal	[ ]		Documentation about data	[ ]	
Historical process data	[ ]		Disposal data	[ ]	
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Areal photographs	[ ]		Safety analysis report	[ ]	
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Unusual Occurrence Report	[ ]		Initial assessment	[ ]	
Summary documents	[ ]		Well data	[ ]	
Facility SOPs	[ ]		Construction data	[ ]	
OTHER	[X]	1			

Question 8. Is there evidence that this hazardous substance/constituent is present at the source as it exists today? If so, describe the evidence.

Block 1 Answer:

Yes, sampling information confirms that PCBs are present in the soil at CPP-51. All transformers and containerized contaminated materials have been removed.

Block 2 How reliable is/are the information source/s? X High __Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Sampling report confirms presence of PCBs in soil.

Block 3 Has this INFORMATION been confirmed? X Yes __No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Sampling report confirms presence of PCBs in soil.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[ ]		Analytical data	[ ]	
Anecdotal	[ ]		Documentation about data	[ ]	
Historical process data	[ ]		Disposal data	[ ]	
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Unusual Occurrence Report	[X]	1	Initial assessment	[ ]	
Summary documents	[ ]		Well data	[ ]	
Facility SOPs	[ ]		Construction data	[ ]	
OTHER	[X]	2			

REFERENCES

1. "Report for the Chemical Processing Plant Drilling and Sampling Program at Solid Waste Management Unit CPP-51", Golder and Associates, January 1991.

2. EG&G Risk Evaluation, January 1992.